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STAT

COST ANALYSIS (AMENDED)

for follow-on

ELECTROMAGNETIC RECONNAISSANCE SYSTEMS

1940 J (D)

5 October 1964

25 YEAR RE-REVIEW

## 1940 J (D) SUMMARY LISTING

of

## ADDITIONAL AND/OR ADJUSTED REQUIREMENTS

<u>Description</u>	<u>Cost</u>
Microfilming of Engineering Drawings	\$ 11,983.
System Control Logic (SCL) Changes	86,318.
DPOD Maintenance Support	49,510.
Weight Reduction	1,038,813.
Revised Provisioning Cost	(84,840.)
Open Procurement of Test Equipment in Lieu of GFE	151,706.
Pre-Requisite Training	27,982.
Adjustment of O. H. and G & A Rates	(277,422.)
Estimated Cost	1,004,050.
Planned Fee	85,390.
Total Est. Cost - Incl. Fee	\$ 1,089,440.

Requirement: Microfilming of Engineering Drawings

Description: The following shall be provided in fulfillment of this item:

1. 35mm microfilm per MIL-M-9868  
Type I - Silver Halide  
Class 1 - Camera microfilm (negative type)  
Clear line image  
  
Note: The quality of microfilm will not be  
subject to the requirements of MIL-  
M-9868 - 15 April 1960
2. Microfilm will be mounted on aperture card  
per MIL-C-9877A  
Type I - Cold seal, pressure sensitive  
microfilm carrier.
3. Aperture card will be Code Card "A"  
Form DD 1306, per MIL Standard 804A.
4. All spec and source control drawings will  
be microfilmed and mounted in aperture  
cards and a vendor deck will be provided.
5. D'L's and IL's will be provided per MIL  
Standard 804A.
6. All assemblies at the EMR Contractor's level  
will be submitted on microfilm.
7. All schematics will be submitted on microfilm.

Requirements: System Control Logic (SCL) changes

Description: The following modifications judged by this contractor to be significantly beneficial to the performance of the SCL are presently being incorporated:

1. Class D Alarm
2. Class C Alarm
3. P Match
4. Track B Output
5. Time Mark Word
6. Status Update Tag
7. Stop and Match Tag
8. Addition of a Bit to the Analog Start Word

Requirement: DPOD Maintenance Support

Description: As set forth under this contractor's Proposal 1940 J (C) of 24 July 1964, it was intended that maintenance services for the SDS 910 and 920 Computers would be provided by Scientific Data Systems personnel. The introduction of certain security matters have precluded such an arrangement however and necessitated a change in procedure in that computer maintenance services must now be provided by the EMR contractor.

The introduction of this requirement effects an increase in program cost reflected basically in additional program personnel, basic 910/920 Computer training for two (2) EMR contractor personnel and the acquisition of spare parts.

It is to be noted however that certain benefits will be derived by the contracting agency in that using activity personnel will doubtless acquire certain training from this contractor's personnel and the title to all spare parts will vest with the Government.

Requirement: Weight Reduction

Description: Under this contractor's 24 July 1964 proposal, provision was incorporated to effect a nominal weight reduction encompassing a section of the structures(s) (end-bells), antennas and common equipment. It is to be noted that additional weight reduction measures were contemplated at the time of submitting the 1940 J (C) proposal but could not be firmly defined.

As proposed hereunder, this contractor has entered into an extensive weight reduction program encompassing:

1. Structure re-design as a result of a reduction in the environmental criteria.
2. Use of more exotic materials.
3. Solid state L. O. for Bands 6 and 7
4. Solid state L. O. Study for Band 8 only
5. Selected assemblies of the "E" and "C" Systems will be redesigned.

Requirement: Revised Provisioning Cost

Description: In the period subsequent to 24 July 1964, a number of firm subcontractor quotations for provisioning documentation have been received. The net affect of these firm quotations has been to reduce the estimated cost proposed by this contractor under 1940 J (C).

Requirement: Open Procurement of Test Equipment in Lieu of GFE

Description: As part of this contractor's 24 July 1964 Proposal 1940 J (C) under Exhibit "G" (Part B), a listing of test equipment required in support of the CPC effort was set forth.

Recent SPO direction has been to isolate from the aforementioned listing those items previously unavailable in Depot inventory to support the DT & E Program (Contract AF33(657)-12278) and submit said unavailable items to the Contracting Officer for open procurement authorization.

This contractor's procurement authorization request was submitted on 2 September 1964 and has received Contracting Officer endorsement.



Requirement: Pre-Requisite Training Introduction

Description: Subsequent to submittal of this contractor's 24 July 1964 Proposal 1940 J (C), it has been determined that prior to entry into the formal training course (Item #7) it will be necessary to conduct pre-requisite training. This determination has been reached by an actual assessment of typical using activity personnel who will be enrolled in the formal training course.

The pre-requisite training courses (computer programming and digital techniques respectively) are designed for personnel whose experience in hardware maintenance and/or software computer programming is limited.

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: All		PR NO:			
		CONTRACT:			
DESCRIPTION OF ITEM: SUMMARY OF REVISIONS TO ALL WSI'S					
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR	
		LABOR CLASS A	LABOR CLASS B	F.E.	
ADMINISTRATIVE (DIRECT)	5,374	16,480	3,335		19,815
ENGINEERING	31,712	183,956			183,956
TECHNICIANS	19,726	76,972			76,972
PUBLICATIONS	240	770			770
DESIGN AND DRAFTING	18,742	67,298			67,298
SHOP	21,902		69,716		69,716
ELECTRICAL ASSEMBLY	3,251		9,210		9,210
INSPECTION	2,992		8,893		8,893
SPARES DATA PREPARATION	360		1,174		1,174
PACKAGING AND SHIPPING					
FIELD ENGINEERING	3,020		2,431	16,258	18,689
(1) TOTAL DIRECT LABOR		345,476	94,759	\$16,258	456,493
OVERHEAD: - % OF DIRECT LABOR CLASS (A) \$ 226,495					
82.5 % OF DIRECT LABOR CLASS (B) \$ 78,176					
50.0 % of Field Engineering 8,130					
(2) TOTAL OVERHEAD				\$	312,801
RAW MATERIAL AND PURCHASED PARTS		181,674			
SUBCONTRACTING		36,698			
TRAVEL AND SUBSISTENCE		25,375			
OVERTIME PREMIUM		25,493			
PACKAGING AND SHIPPING					
OTHER DIRECT CHARGES		9,500			
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$	278,740
(4) TOTAL OF (1) AND (2) AND (3)				\$	1,048,044
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)				\$	(43,994)
(6) ESTIMATED COST, (4) + (5)				\$	1,004,050
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$	85,390
GRAND TOTAL, (6) + (7)				\$	1,089,440

## ANALYSIS

FILE: 1940 J(8)

DATE: 23 September 1964

ITEM NO: I		PR NO: CONTRACT		
DESCRIPTION OF ITEM: REVISION TO WSI #1				
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	4,894	15,558	3,335	18,893
ENGINEERING	30,552	177,128		177,128
TECHNICIANS	18,946	74,370		74,370
PUBLICATIONS				
DESIGN AND DRAFTING	16,462	61,497		61,497
SHOP	21,902		69,716	69,716
ELECTRICAL ASSEMBLY	3,251		9,210	9,210
INSPECTION	2,992		8,893	8,893
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		328,553	91,154	\$ 419,707
OVERHEAD: % OF DIRECT LABOR CLASS (A) \$		249,514		
82.5 % OF DIRECT LABOR CLASS (B) \$		75,201		
(2) TOTAL OVERHEAD		\$ 324,715		
RAW MATERIAL AND PURCHASED PARTS		47,348		
SUBCONTRACTING		116,322		
TRAVEL AND SUBSISTENCE		11,650		
OVERTIME PREMIUM		25,235		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$ 200,555		
(4) TOTAL OF (1) AND (2) AND (3)		\$ 944,977		
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)		\$ (12,107)		
(6) ESTIMATED COST, (4) + (5)		\$ 932,870		
(7) PLANNED PROFIT OR FEE % OF ESTIMATED COST, (6)		\$ 79,294		
GRAND TOTAL, (6) + (7)		\$ 1,012,164		

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: II		PR NO:		
DESCRIPTION OF ITEM: REVISION TO WSI #2		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING				
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR				\$
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$ (893)		
		% OF DIRECT LABOR CLASS (B) \$		
(2) TOTAL OVERHEAD				\$ (893)
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		(20,425)		
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ (20,425)
(4) TOTAL OF (1) AND (2) AND (3)				\$ (21,318)
(5) GENERAL AND ADMINISTRATIVE EXPENSE, - % OF (4)				\$ (3,112)
(6) ESTIMATED COST, (4) + (5)				\$ (24,430)
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ (2,077)
GRAND TOTAL, (6) + (7)				\$ (26,507)

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 3		PR NO: CONTRACT:		
DESCRIPTION OF ITEM: REVISION OF WSI #3				
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING				
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR				\$
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$ (23,222)		
		% OF DIRECT LABOR CLASS (B) \$		
(2) TOTAL OVERHEAD				\$ (23,222)
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING				
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$
(4) TOTAL OF (1) AND (2) AND (3)				\$ (23,222)
(5) GENERAL AND ADMINISTRATIVE EXPENSE,		% OF (4)		\$ (24,645)
(6) ESTIMATED COST, (4) + (5)				\$ (47,867)
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ (4,069)
GRAND TOTAL, (6) + (7)				\$ (51,936)

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 4.		PR NO:		
DESCRIPTION OF ITEM: REVISION TO WSI #4		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING	120	684		684
TECHNICIANS	80	286		286
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION	360		1,174	1,174
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		970	1,174	\$ 2,144
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$ 839		
		% OF DIRECT LABOR CLASS (B) \$ 969		
(2) TOTAL OVERHEAD		\$ 1,808		
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		(56,994)		
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM		94		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$ (56,900)		
(4) TOTAL OF (1) AND (2) AND (3)		\$ (52,938)		
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)		\$ (5,899)		
(6) ESTIMATED COST, (4) + (5)		\$ (58,837)		
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)		\$ (5,001)		
GRAND TOTAL, (6) + (7)		\$ (63,838)		

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 5.		PR NO:			
		CONTRACT:			
DESCRIPTION OF ITEM: REVISION OF WSI #5					
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR	
		LABOR CLASS A	LABOR CLASS B		
ADMINISTRATIVE (DIRECT)					
ENGINEERING					
TECHNICIANS					
PUBLICATIONS					
DESIGN AND DRAFTING					
SHOP					
ELECTRICAL ASSEMBLY					
INSPECTION					
SPARES DATA PREPARATION					
PACKAGING AND SHIPPING					
FIELD ENGINEERING					
(1) TOTAL DIRECT LABOR				\$	
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$ (3,828)			
		% OF DIRECT LABOR CLASS (B) \$			
(2) TOTAL OVERHEAD		\$ (3,828)			
RAW MATERIAL AND PURCHASED PARTS					
SUBCONTRACTING					
TRAVEL AND SUBSISTENCE					
OVERTIME PREMIUM					
PACKAGING AND SHIPPING					
OTHER DIRECT CHARGES					
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$			
(4) TOTAL OF (1) AND (2) AND (3)		\$ (3,828)			
(5) GENERAL AND ADMINISTRATIVE EXPENSE,		% OF (4)		\$ (1,914)	
(6) ESTIMATED COST, (4) + (5)		\$ (5,742)			
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)		\$ (488)			
GRAND TOTAL, (6) + (7)		\$ (6,230)			

## ANALYSIS

FILE: 1940 J(D)

DATE: 23-September 1964

ITEM NO: 6.

PR NO:  
CONTRACT:

DESCRIPTION OF ITEM: REVISION TO WSI #6

DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING				
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING	1,960	4,755		4,755
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		4,755		\$ 4,755
OVERHEAD: % OF DIRECT LABOR CLASS (A) \$ (157)				
% OF DIRECT LABOR CLASS (B) \$				
(2) TOTAL OVERHEAD				\$ (157)
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		1,365		
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 1,365
(4) TOTAL OF (1) AND (2) AND (3)				\$ 5,963
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)				\$ (1,565)
(6) ESTIMATED COST, (4) + (5)				\$ 4,398
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 374
GRAND TOTAL, (6) + (7)				\$ 4,772



## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 7		PR NO:			
		CONTRACT:			
DESCRIPTION OF ITEM: REVISION OF WSI #7					
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR	
		LABOR CLASS A	LABOR CLASS B	FENG	
ADMINISTRATIVE (DIRECT)	480	922			922
ENGINEERING	160	1,131			1,131
TECHNICIANS					
PUBLICATIONS	240	770			770
DESIGN AND DRAFTING	320	1,046			1,046
SHOP					
ELECTRICAL ASSEMBLY					
INSPECTION					
SPARES DATA PREPARATION					
PACKAGING AND SHIPPING					
FIELD ENGINEERING	1,440		2,431	4,863	7,294
(1) TOTAL DIRECT LABOR		3,869	2,431	\$4,863	11,163
OVERHEAD: % OF DIRECT LABOR CLASS (A) \$ 2,571					
82.5% OF DIRECT LABOR CLASS (B) \$ 2,006					
50 % of Field Engineering 2,432					
(2) TOTAL OVERHEAD				\$	7,009
RAW MATERIAL AND PURCHASED PARTS					
SUBCONTRACTING					
TRAVEL AND SUBSISTENCE					
OVERTIME PREMIUM					
PACKAGING AND SHIPPING					
OTHER DIRECT CHARGES					
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$	6,105
(4) TOTAL OF (1) AND (2) AND (3)				\$	24,277
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)				\$	1,474
(6) ESTIMATED COST, (4) + (5)				\$	25,751
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$	2,189
GRAND TOTAL, (6) + (7)				\$	27,940

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 8		PR NO:		
		CONTRACT:		
DESCRIPTION OF ITEM: REVISION TO WSI #8				
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)		-	Field Eng.	
ENGINEERING	880	5,013		5,013
TECHNICIANS	700	2,316		2,316
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING	1,580		11,395	11,395
(1) TOTAL DIRECT LABOR		7,329	11,395	\$ 18,724
OVERHEAD: % OF DIRECT LABOR CLASS (A) \$ 1,671				
% OF DIRECT LABOR CLASS (B) \$				
50.0% of Field Eng. Labor 5,698				
(2) TOTAL OVERHEAD				\$ 7,369
RAW MATERIAL AND PURCHASED PARTS		134,326		
SUBCONTRACTING		(3,570)		
TRAVEL AND SUBSISTENCE		11,120		
OVERTIME PREMIUM		164		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES		6,000		
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$ 148,040		
(4) TOTAL OF (1) AND (2) AND (3)		\$ 174,133		
(5) GENERAL AND ADMINISTRATIVE EXPENSE, % OF (4)		\$ 4,607		
(6) ESTIMATED COST, (4) + (5)		\$ 178,740		
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)		\$ 15,239		
GRAND TOTAL, (6) + (7)		\$ 193,979		

## ANALYSIS

FILE: 1940 J(D)

DATE: 23 September 1964

ITEM NO: 10		PR NO:		
		CONTRACT:		
DESCRIPTION OF ITEM: REVISION OF WSI #10				
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING				
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR				\$
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$		
		% OF DIRECT LABOR CLASS (B) \$		
(2) TOTAL OVERHEAD				\$
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING				
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$
(4) TOTAL OF (1) AND (2) AND (3)				\$
(5) GENERAL AND ADMINISTRATIVE EXPENSE,		% OF (4)	\$	(833)
(6) ESTIMATED COST, (4) + (5)			\$	(833)
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)			\$	(71)
GRAND TOTAL, (6) + (7)			\$	(904)

COST ANALYSIS

for follow-on

ELECTROMAGNETIC RECONNAISSANCE SYSTEMS

1940 J (C)

24 July 1964

Reference: Letter Contract AF33(657)-12846

The contents hereof are submitted in response to  
SPO Request for Proposal [ ] dated  
20 March 1964, signed [ ]

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This contractor's proposal is offered firm for  
Government acceptance through the period ending  
30 September 1964.

24 July 1965

[ ]  
Treasurer

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GENERAL CONSIDERATIONS

A - Factors Attendant To The Submittal Of A Cost Type Proposal

The Cost Analysis (Proposal) submitted herewith contemplates the definitization of a Cost Type Contract. This contractor offers for Contracting Agency evaluation the following factors which make it essential that a Cost Type Contract be considered:

1. Manufacturing costs cannot be estimated in the degree which would permit this contractor's entry on a reasonably confident basis, into a Fixed Price Type of procurement - to date this contractor's test and check-out effort on the 1st EMR System (R & D equipment) has been primarily in the component and sub-assembly area. It is to be recognized that the more significant testing, insofar as equipment configuration is concerned, is in the sub-system and system areas. Until such time as system testing has been completed within this contractor's facility, the EMR System Configuration, and attendant cost, must remain unknown to some extent.
2. Environmental Tests which will be conducted on the 2nd EMR System (R & D equipment) could effect configuration changes in the follow-on systems - significant environmental testing encompassing Vibration, Temperature, Altitude and possibly Shock, could result in configuration changes and attendant cost expenditures on the follow-on program.

3. Configuration changes resulting from mock-up and Integration Testing at ADP are unknown and any bearing these changes will have on the follow-on equipment are purely conjectural at this time - any attempt this contractor might make to estimate costs resulting from Phases I & II of the test program could not be considered compatible with Fixed Price Type contracting from either the Government's or contractor's standpoint.
  4. Overall sub-contractor efforts have not reached a point where Fixed Price Procurements can be definitized - e.g. AMPEX Corp., supplier of the Wide Band Recorder equipments (Airborne and Ground) which forms an integral part of the EMR system, will not at present enter into contract for follow-on units on other than a cost basis, and no firm quotation of any kind has been obtained from AMPEX for follow-on Wide Band Recorders at the time of this proposal submission.
  5. AGE - The operational AGE equipment that will be delivered under this program is necessarily more complex than the Interim AGE and represents significant contractor development.
- B - This contractor's Cost Proposal and attendant scheduling as reflected under section "D" hereof, has been compiled on the basis that total cumulative expenditures under Contracts AF33(657)-12278, 12843, and 12846 will not exceed \$51,000,000. through the period ending 30 June 1965 (end of FY 65 period). The aforementioned limitation is acknowledged with the understanding that deliveries of prime equipment will be accomplished expediently, wherever possible in accordance



with the specific periodic requirements set forth in the follow-on EMR and CPC Request For Proposal(s), with limited extensions to the RFP dates being tolerated in difficult circumstances.

NOTE: The above \$51,000,000. is to be recognized strictly as an expenditure limitation and is exclusive of \$8,550,000. in commitments which this contractor will be obligated for as of 30 June 1965 and for which coverage will be required.

C - This contractor offers the following comment re. the terms and conditions for Cost Type contracts set forth under the RFP:

- (a) "Authorization and Consent" - it is requested that ASPR 9-102.2 be substituted for 9-102.1 (7-203.23).
- (b) "Patent Indemnity" (7-204.5) - contractor's proposal is contingent upon deletion of this clause in its entirety.
- (c) All other clauses for Cost Reimbursement Type Supply Contracts are acceptable in all respects.

D - This contractor's quotation has been compiled on the basis that equipment delivered shall be accomplished FOB destination, said destination presumed to be the furthest possible continental U. S. A. site served by commercial air carrier.

0120002

Item #1

Description: Six (6) each sets of EMR equipments

*in accordance with Rev. D. (1940)*  
*→ 1940 SPS-1*  
*dated 8 Oct 1961*

Considerations:

1. Follow-on equipments shall be manufactured in accordance with EMR System Performance Specification, ~~1912-SPS-1 Rev. C., Vol. I~~ dated ~~9 January 1964~~ as amended, said amendment submitted to be Rev. D which is to reflect the general configuration and capability of the 1st EMR equipment as delivered from this contractor's facility under Contract AF33(657)-12278. It is intended that the updated document shall be submitted for SPO review and approval within two (2) weeks after delivery of the 1st EMR System from this contractor's facility.

It is further intended that Product Improvement Items and/or Special Study Proposals will be submitted (on an ECP basis) subsequent to contract definitization, said ECP(s) to represent the recommendations of this contractor as related to the performance and capability of the EMR units specifically as well as General State of the Art Technology.

2. The following is submitted re. the responsibility for incorporating changes (fixes) emanating from EMR System #1 and #2 *(old contract)* (Contract AF33(657)-12278) into System #3 through #8 (Contract AF33(657)-12846):

- (a) This contractor recognizes the responsibility for incorporating into EMR Equipments #3 through #8 all changes to Equipments #1 and 2, said changes including but not limited to those resulting from in-plant

environmental testing and Phases I and II at ADP

where same will have been effected up to and  
including the period ending <sup>31 Jan 1965</sup> ~~31 December 1964~~ (\*).

- (b) All <sup>changes</sup> ~~fixes~~ effected subsequent to <sup>31 Jan 1965</sup> ~~31 December 1964~~ (\*)  
said fixes including but not limited to those resulting  
from Cat. I testing will be incorporated into EMR  
Systems #3 through #8 in accordance with the Engineer-  
ing Change Proposal (ECP) procedure cited under Item #5  
of the EMR Subsystem Statement of Work.

\* Date established as design freeze

- #258,587 (cont) 3. The following is submitted re. the period of equipment  
acceptance as opposed to the period of ADP Air Vehicle Integration  
Assistance (Item 9). It is proposed that equipment acceptance for six  
(6) EMR follow-on systems be conducted within two (2) months following  
delivery of each EMR system from this contractor's facility. It is  
this contractor's judgement that the aforementioned period is of  
sufficient duration to conduct an appropriate acceptance, including  
necessary flight testing, and as such this contractor's proposal is  
compiled on the two (2) month basis. Services over and above the two (2)  
month period for each of six (6) EMR systems are to be rendered as part  
of Item 9, Air Vehicle Integration Assistance.

4. This contractor's proposal does not provide for conduct-  
ing any environmental testing under Contract AF33(657)-12846. (out)

5. This contractor submits the following summary of special  
studies and/or development that are presently being carried out under  
Contract AF33(657)-12846: (this contract) (out all)

- (a) Overall weight reduction of approximately <sup>12</sup>~~35~~ lbs. encompassing specifically the structure(s), antennas, common equipment, receivers and SCL.

Note: Additional weight reduction measures are contemplated by this contractor and will be submitted for Contracting Agency evaluation and direction at a future date, said submittal to be presumably on an ECP basis.

*considered in spec.*

- (b) Capability of PRI Match on Alarm

- (c) Simplified Logic in COMINT Subsystem

*including unclassified information that has been completed.*

- (d) Maintainability improvements encompassing the SCL, Wide and Narrow Band Recorders and various E and C Subsystem Assemblies.

Note: The results of this contractor's efforts in the foregoing areas delineating specific features that will be incorporated in the follow-on EMR Systems (Ser. 3 through 8) will be compiled under the "Improved Maintenance Capability", Special Study Report delivered in fulfillment of EMR Work Statement, Item 12(i) under Contract AF33(657)-12278 (DT & E phase).

Item #2

Description: Spare Parts for Item 1 (EMR equipments)

*Revised from last*

Considerations:

1. Basically this contractor's proposal presents Work Statement Item 2 in two (2) parts, specifically:

(a) The cost for preparing provisioning documentation which shall be defined as the procedures, terms and conditions governing quantitative determinations of the spares to support Item 1 of Contract, said costs having been included firm as proposed hereunder, and

*A, Item  
G, P, C, and*

(b) The budgetary cost for acquisition of items recommended and approved pursuant to (a) above, said cost having been included as proposed item 2(b) under a category defined as "Recommended Reserve For Undefined Areas".

2. With relation to 1(a) above, documentation shall be compiled in accordance with the instructions set forth under Exhibit "E" of the RFP taking exception to areas wherein specific definition in the nature of redirection and/or clarification was given this contractor during the 8-9 June Provisioning Guidance Meeting.

3. Further in connection with 1(a) it is recognized that this contractor's obligation for updating the Spares Provisioning List shall be fulfilled at such time as the final EMR System (Serial #8) has been accepted by the Government.

4. With relation to 1(b) above the recommended budgetary reserve is intended to support EMR systems for a period of one (1) year - depletion allowances beyond this point have not been considered hereunder.

Item #3

Description: Three (3) each Operational Aerospace Ground Equipments (AGE)

Considerations:

1. Per telecon of 11 June between SPO and contractor personnel this item shall be limited specifically to three (3) sets of OPS AGE equipments. All additional AGE type equipment which might normally be categorized under the description of AGE will nonetheless be proposed under Item 8B as part of the Field Shop equipment.

NOTE: Consequent to the above, Exhibit "D" of the RFP, shall not apply except as related to the compilation of the "AGE Requirements List".

2. The requirement for "AGE Requirements List(s)" will be fulfilled under Item 3 for all AGE type equipment (Items 3 & 8B). *(this is just a list, not the actual list)*

3. This contractor's performance is presently recognized to be in accordance with the "Specification For Aerospace Ground Equipment, 1940 AGE 1" Rev. A dated 2 July 1964. It is contemplated that a revision (addendum) to the aforementioned document will be processed in the immediate future (prior to contract definitization), said revision to be strictly in the nature of clarification and will incorporate current updated engineering information.

4. This contractor understands that the three (3) OPS AGE equipments will be deployed as follows:

*infinitely*

1 System remains at the contractor's facility for

EMR systems check-out

1 System to be located at the CPC

1 System to be deployed with the MPC

*system 1 goes with system 1*  
2 " " " " 2  
3 " " " " 6



Item #4

Description: Spare Parts for Item 3 (OPS AGE) and Item 8B (Field Shop AGE)

Considerations:

1. This contractor's proposal presents Work Statement Item 4 in two (2) parts, specifically:

(a) The cost for preparing provisioning documentation, said cost having been included firm as proposed however, and

(b) The budgetary cost for acquisition of items recommended and approved pursuant to (a) above, said cost having been included as proposed item 4(b) under a category defined as "Recommended Reserve for Undefined Areas".

2. With relation to 1(a) above, documentation shall be compiled in accordance with the instructions set forth under Exhibit "E" of the RFP taking exception to areas wherein specific definition in the nature of redirection and/or clarification was given this contractor during the 8-9 June Provisioning Guidance Meeting.

3. Further in connection with 1(a) it is recognized that this contractor's obligation for updating the Spares Provisioning List shall be fulfilled at such time as the final OPS AGE Unit has been accepted by the Government and the Field Shop will have been activated.

4. With relation to 1(b) above, the Recommended Budgetary Reserve is intended to support the OPS AGE and Field Shop equipment for a period

of one (1) year - depletion allowances beyond this point have not been considered hereunder.

5. Neither provisioning documentation or spare parts will be provided by this contractor for the SDS 910 and 920 Computers (Digital Printout Device equipments) - reference; Item 10, Para. 2 hereunder. ) out

Item #5

Description: Preliminary (preparatory documentation) Effort Associated with ANA Bulletin 445, Special Studies and ECP(s)

Considerations:

(ECP)  
out

1. Basically this contractor's proposal present Work Statement Item 5 in two (2) parts, specifically:

- (a) Cost attendant to the preliminary investigation associated with either an Engineering Study or Engineering Change Proposal. This preliminary investigation will resolve definition of the approach that is to be taken and related cost. It will in effect constitute the equivalent of of a Technical Proposal sufficient to allow complete Contracting Agency evaluation and subsequent entry into negotiation in the event it is resolved that same should be incorporated as an obligation under contract. These preliminary investigation costs only have been included under Item 5(a), and
- (b) Budgetary cost for the accomplishment of Engineering Changes or Special Studies resulting from (a) above, said budgetary cost having been included as proposed Item 5(b) under a category defined as "Recommended Reserve For Undefined Areas".

*Table out*

2. Configuration control in accordance with ANA Bulletin 445 will be complied with by this Contractor. The cost for accomplishing same has not been compiled under this item but rather included in the respective equipment items.

Item #6

Description: Engineering Data-Handbooks, Drawings & Mo. Progress Reports

Considerations:

1. Handbooks

(a) The following handbooks will be delivered:

1. Supplement to Vehicle Flight Handbook
2. Pre-Flight Operation & Maintenance Handbook
3. Field Shop/Depot Operation & Maintenance Handbook
4. AGE Handbook
5. Digital Printout Device Handbook
6. I/O Simulator Handbook

(b) Good commercial practice (all handbooks).

(c) Handbook material from prototype programs will be used to the fullest extent.

(d) All handbooks will be delivered in two (2) separate submissions:

(1) Preliminary EMR/AGE operational handbooks will be delivered prior to Cat. III testing.

(2) Final EMR/AGE operational handbooks will be delivered 90 days after completion of Cat. III testing.

Note: Final operational handbooks will be an updating and completion of the preliminary operational handbooks. No continuous up-

dating of operational handbooks during

Cat. III testing will be provided.

(e) No exploded view illustrations, IPB's, or Federal Stock  
Catalog references will be provided.

2. Drawings: The proposal submitted hereunder reflects the  
delivery of one (1) ea. sets of reproducible and reproduction type  
copies.

3. Progress Reports: The proposal submitted hereunder reflects  
the submission of Monthly Fiscal and Technical Progress Reports only.

45 1 50

Item #7

Description: Training - Materials and Services

Considerations:

1. Courses to be provided:

- (a) Preflight Maintenance Course
- (b) Field Shop Maintenance Course
- (c) AGE Maintenance Course

07B-04

2. Cat. II training material and instructors will be utilized to the maximum extent. In the interest of minimizing on preparation costs this contractor proposes to conduct OPS training utilizing Cat. II instructions. It is to be noted that changes in overall program planning which necessitate changes to the aforementioned procedure could result in additional program cost.

3. Schedule completion of the first set of courses will approximately coincide with the start of the operational program. Wherever possible, completion of subsequent sets of courses will coincide with delivery of additional systems to the field.

4. All training will be taught on site at the equipment location, except for the first AGE Maintenance course which will be taught at this contractor's facility.

5. This contractor's proposal provides for all training materials and training aid such as viewgraphs, slides and film strips, but does not include costs for an actual system for training purposes.

6. Use of an actual system for training purposes is assumed.

No provisions have been made for this contractor to provide such a system, nor have any provisions been made for this contractor to refurbish an actual system for training purposes.

7. Classrooms and facilities (blackboards, projectors, etc.) at the training site are assumed. No costs are included in these estimates for such items.

8. Minimum class sizes of 8-10 students is assumed for all courses requiring equipment time.

9. Student prerequisites remain to be determined. However, student levels are assumed to be in accordance with job descriptions as indicated in EMR and GDR Training Plan (1912-R-15) dated 1 April 1964.



Item #8

Description: Special Tooling, Facilities & Equipment - Field Shop and Contractor's Facility (for manufacturing & Depot requirements)

Considerations:

1. The specific definition of Item 8, constituting a revision to that set forth in the RFP, shall be as agreed during the 8-9 June Provisioning Guidance Meeting and subsequently confirmed by SPO letter dated 23 June 1964. *ask for letter*

2. With reference to the Operational Program Field Shop: (RFP)

- (a) Total maintenance capability is broken down into 16 test stations, each station having a specific repair responsibility and all the necessary special and commercial test equipment to perform those repairs.
- (b) For the most part specific repair capabilities will be down to the module level.
- (c) No test equipment calibration and repair capability is included since it is assumed an Instrument Room Facility will be available.
- (d) Except for AGE, DPOD, and I/O Simulator each of which will have Operation and Maintenance handbooks, no handbook material will be available for the special test equipment.
- (e) Special test equipment drawings will be limited to good commercial practice type schematics only. Some of the

larger pieces of special test equipment will also have those wiring diagrams and major assembly drawings which were necessary for equipment manufacture.

(f) All special test equipment will be manufactured to good commercial practice only.

(g) No computer repair <sup>system</sup> capability has been included in <sup>included in</sup> this contractor's estimates. <sup>the addendum</sup>

3. With reference to the Depot level repair and overhaul facility which is to be located at this contractor's plant, same will be equipped to the fullest extent necessary to support the EMR equipment. That is to say it will be capable of repair and overhaul from the system to modular level (field shop capability) as well as the piece part level wherein special skill and/or equipment will be required.

*7-1 is with spec*

Item #9

Description: Air Vehicle Integration Assistance

Considerations:

1. Air Vehicle Integration Assistance, herein proposed on a budgetary cost basis will encompass the following areas:

- (a) Time required in the contractual sell-off and acceptance of this contractor's EMR equipment(s) wherein said checkout shall exceed the two (2) month period which this contractor has proposed under item #1, and
- (b) Time spent in providing assistance to ADP in other support areas, primarily the installation, ground check and flight test of each vehicle required to be capable of carrying an EMR system.

2. The budgetary proposal for this item encompasses manpower only and reflects the basic assumption that this contractor will, whenever possible, be permitted the utilization of field shop equipment at the Flight Test and OPS Sites during the integration phase - no additional test equipment will be provided under item #9.

300K

Item #10

Description: Procurement of Rental Computer Utilized in 1st Digital Printout Device (DPOD)

Considerations:

1. Above item entered into Work Statement pursuant to 9 April 1964 telecon between SPO and contractor personnel.

2. The two (2) Scientific Data Systems Computers (910 & 920) utilized in the Digital Printout Devices (DPOD's) are being acquired on a "buy" basis with provision being made for SDS personnel to provide maintenance services through the period(s) ending 30 June 1965 for one computer and 30 June 1966 for the other. It is to be noted that under the service agreement, spare parts will be supplied by SDS and not provided by this contractor as an obligation under Contract AF33(657)-12846. It is presumed that a similar type service contract will be carried forward by the Government with SDS subsequent to the above dates.

SUMMARY COST ANALYSIS

## (a) Presently Defined Items

<u>Item #</u>	<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
1	6	EMR Equipments	\$23,085,612.
2(a)	Lot	Spare Parts Provisioning for Item 1	283,657.
3	3	Operational AGE Equipments	5,359,421.
4(a)	Lot	Spare Parts Provisioning for Item 3 & 8B	269,446.
5(a)	Lot	Config. Control-Preparatory Document.	372,907.
6	Lot	Engineering Data	499,282.
7	Lot	Training	168,621.
8	Lot	Spec. Tooling, Facilities & Equip.	2,629,010.
10	1	Computer for Digital Printout Device	197,933.

Total Est. Cost Including Fixed Fee \$32,865,889.

## (b) Recommended Reserve for Undefined Areas - Budgetary

<u>Proposed Item #</u>	<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
2(b)	Lot	Spare Parts for Item 1 (EMR Equip.)	\$ 8,100,000.
4(b)	Lot	Spare Parts for Item 3 (AGE Equip.)	600,000.
5(b)	Lot	Prosecution of ANA Bul. 445-CL.II chgs., Spec. Studies & Eng. Chg. Prop. (ECP's)	500,000.
9	100	Man Mos. Air Vehicle Integration Assistance	300,000.

Total Est. Cost Including Fixed Fee - Budgetary \$ 9,500,000.

## ANALYSIS

FILE: 1940J (C)

DATE: 20 July 1954

ITEM NO: Summary EMR/AGE		PR NO:			
DESCRIPTION OF ITEM:		CONTRACT:		1940 J(C)	
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		Labor Class	Total
		LABOR CLASS A	LABOR CLASS B		LABOR
ADMINISTRATIVE (DIRECT)	322,890	726,332	464,849		1,191,181
ENGINEERING	511,149	3,133,510	13,453		3,146,963
TECHNICIANS	201,695	736,234	32,461		768,695
PUBLICATIONS	24,215	90,427			90,427
DESIGN AND DRAFTING	103,314	378,955			378,955
SHOP	238,938	29,952	732,542		762,494
ELECTRICAL ASSEMBLY	300,535	9,314	869,378		878,692
INSPECTION	137,008		429,162		429,162
SPARES DATA PREPARATION	13,415		49,297		49,297
PACKAGING AND SHIPPING	748		2,281		2,281
FIELD ENGINEERING	11,520			46,571	46,571
(1) TOTAL DIRECT LABOR		5,104,724	2,593,423	\$46,571	7,744,718
OVERHEAD: 105% OF DIRECT LABOR CLASS (A)		\$ 5,359,959			
82.5% OF DIRECT LABOR CLASS (B)		\$ 2,139,573			
50% of Direct Labor Class (C)		\$ 23,285			
(2) TOTAL OVERHEAD				\$ 7,522,817	
RAW MATERIAL AND PURCHASED PARTS		5,309,616			
SUBCONTRACTING		6,141,565			
TRAVEL AND SUBSISTENCE		291,079			
OVERTIME PREMIUM		331,637			
PACKAGING AND SHIPPING		321,713			
OTHER DIRECT CHARGES					
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 12,395,610	
(4) TOTAL OF (1) AND (2) AND (3)				\$ 27,663,145	
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 2,627,998	
(6) ESTIMATED COST, (4) + (5)				\$ 30,291,143	
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 2,574,746	
GRAND TOTAL, (6) + (7)				\$ 32,865,889	

## ANALYSIS

FILE: 1940J (C)

DATE: 20 July 1964

ITEM NO: 1		PR NO: 1940 J(C)			
DESCRIPTION OF ITEM: Six (6) EMRs		CONTRACT:			
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		Class C	Total LABOR
		LABOR CLASS A	LABOR CLASS B		
ADMINISTRATIVE (DIRECT)	247,839	582,666	358,161		940,827
ENGINEERING	351,869	2,182,827	8,713		2,191,540
TECHNICIANS	133,721	493,796	27,938		521,734
PUBLICATIONS					
DESIGN AND DRAFTING	56,666	208,976			265,642
SHOP	160,813	21,184	490,859		512,043
ELECTRICAL ASSEMBLY	233,493	662	681,390		682,052
INSPECTION	113,244		353,934		353,934
SPARES DATA PREPARATION					
PACKAGING AND SHIPPING	318		966		966
FIELD ENGINEERING	11,520			46,571	46,571
(1) TOTAL DIRECT LABOR		3,490,111	1,921,961	\$46,571	\$5,458,643
OVERHEAD: 105% OF DIRECT LABOR CLASS (A) \$		3,664,616			
82.5 % OF DIRECT LABOR CLASS (B) \$		1,585,618			
50.0% of Direct Labor Class (C) \$		23,285			
(2) TOTAL OVERHEAD				\$	5,273,519
RAW MATERIAL AND PURCHASED PARTS		3,063,148			
SUBCONTRACTING		4,914,096			
TRAVEL AND SUBSISTENCE		247,680			
OVERTIME PREMIUM		238,860			
PACKAGING AND SHIPPING		235,161			
OTHER DIRECT CHARGES					
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$	8,698,945
(4) TOTAL OF (1) AND (2) AND (3)				\$	19,431,107
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$	1,845,955
(6) ESTIMATED COST, (4) + (5)				\$	21,277,062
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$	1,808,550
GRAND TOTAL, (6) + (7)				\$	23,085,612

## ANALYSIS

FILE: 1940 J (C)  
DATE: July 20, 1964

ITEM NO: 2		PR NO: 1940 J (C)		
DESCRIPTION OF ITEM: Spares Prov. for Item 1		CONTRACT: 1940 J (C)		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	6,961	23,689	2,569	26,258
ENGINEERING	2,080	12,016		12,016
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY	592		2,598	2,598
INSPECTION	177		734	734
SPARES DATA PREPARATION	6,720		23,816	23,816
PACKAGING AND SHIPPING	41		122	122
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		35,705	29,839	\$ 65,544
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A) \$		37,490		
82.5 % OF DIRECT LABOR CLASS (B) \$		24,617		
(2) TOTAL OVERHEAD		\$ 62,107		
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		76,000		
TRAVEL AND SUBSISTENCE		4,288		
OVERTIME PREMIUM		3,852		
PACKAGING AND SHIPPING		26,962		
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$ 111,102		
(4) TOTAL OF (1) AND (2) AND (3)		\$ 238,753		
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)		\$ 22,682		
(6) ESTIMATED COST, (4) + (5)		\$ 261,435		
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)		\$ 22,222		
GRAND TOTAL, (6) + (7)		\$ 283,657		



## ANALYSIS

FILE: 1940 J (C)

DATE: July 20, 1964

ITEM NO: 3		PR NO: 1940 J(C)		
DESCRIPTION OF ITEM: Three (3) OPS AGE		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	50,526	80,912	88,575	169,487
ENGINEERING	96,373	585,593	1,476	587,069
TECHNICIANS	42,104	147,841	2,967	150,808
PUBLICATIONS				
DESIGN AND DRAFTING	30,381	113,317		113,317
SHOP	54,121	1,121	168,352	169,473
ELECTRICAL ASSEMBLY	54,382	112	156,497	156,609
INSPECTION	18,675		58,940	58,940
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING	285		868	868
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		928,896	477,675	\$ 1,406,571
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A)		\$ 975,341		
82.5 % OF DIRECT LABOR CLASS (B)		\$ 394,082		
(2) TOTAL OVERHEAD				\$ 1,369,423
RAW MATERIAL AND PURCHASED PARTS		991,519		
SUBCONTRACTING		641,299		
TRAVEL AND SUBSISTENCE		25,790		
OVERTIME PREMIUM		63,612		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES		12,799		
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 1,735,019
(4) TOTAL OF (1) AND (2) AND (3)				\$ 4,511,013
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 428,546
(6) ESTIMATED COST, (4) + (5)				\$ 4,939,559
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 419,862
GRAND TOTAL, (6) + (7)				\$ 5,359,421

## ANALYSIS

FILE: 1940J (C)

DATE: July 20, 1964

ITEM NO: 4		PR NO: 1940 J (C)		
DESCRIPTION OF ITEM: Spares Prov. for Item 3 and 8B		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	854	1,617	1,309	2,926
ENGINEERING	800	4,581		4,581
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY	300		1,316	1,316
INSPECTION	90		373	373
SPARES DATA PREPARATION	6,695		25,481	25,481
PACKAGING AND SHIPPING	25		78	78
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		6,198	28,557	\$ 34,755
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A) \$ 6,508				
82.5 % OF DIRECT LABOR CLASS (B) \$ 23,559				
(2) TOTAL OVERHEAD				\$ 30,067
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		144,000		
TRAVEL AND SUBSISTENCE		5,908		
OVERTIME PREMIUM		2,165		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES		9,897		
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 161,970
(4) TOTAL OF (1) AND (2) AND (3)				\$ 226,792
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 21,545
(6) ESTIMATED COST, (4) + (5)				\$ 248,337
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 21,109
GRAND TOTAL, (6) + (7)				\$ 269,446

## ANALYSIS

FILE: 1940J (C)

DATE: July 20, 1964

ITEM NO: 5		PR NO: 1940 J(C)		
DESCRIPTION OF ITEM: ECP's		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING	20,000	128,500		128,500
TECHNICIANS	6,560	24,610		24,610
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		153,110		\$ 153,110
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A)		\$ 160,765		
% OF DIRECT LABOR CLASS (B)		\$		
(2) TOTAL OVERHEAD				\$ 160,765
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING				
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$
(4) TOTAL OF (1) AND (2) AND (3)				\$ 313,875
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 29,818
(6) ESTIMATED COST, (4) + (5)				\$ 343,693
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 29,214
GRAND TOTAL, (6) + (7)				\$ 372,907

## ANALYSIS

FILE: 1940 J(C)

DATE: July 20, 1964

ITEM NO: 6

PR NO: 1940 J(C)  
CONTRACT:

DESCRIPTION OF ITEM: DATA

DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	5,679	13,100		13,100
ENGINEERING	13,818	78,241		78,241
TECHNICIANS	1,600	5,984		5,984
PUBLICATIONS	23,515	88,775		88,775
DESIGN AND DRAFTING	4,485	15,143		15,143
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		201,243		\$ 201,243
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A) \$ 211,305				
% OF DIRECT LABOR CLASS (B) \$				
(2) TOTAL OVERHEAD				\$ 211,305
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING				
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM		2,697		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES		5,000		
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 7,697
(4) TOTAL OF (1) AND (2) AND (3)				\$ 420,245
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 39,923
(6) ESTIMATED COST, (4) + (5)				\$ 460,168
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 39,114
GRAND TOTAL, (6) + (7)				\$ 499,282

## ANALYSIS

FILE: 1940 J(C)

DATE: July 20, 1964

ITEM NO: 7		PR NO: 1940 J(C)		
DESCRIPTION OF ITEM: Training		CONTRACT: 1940 J(C)		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	800	2,992		2,992
ENGINEERING	9,408	51,162		51,162
TECHNICIANS				
PUBLICATIONS	700	1,652		1,652
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		55,806		\$ 55,806
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A) \$ 58,596				
% OF DIRECT LABOR CLASS (B) \$				
(2) TOTAL OVERHEAD				\$ 58,596
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING				
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 27,526
(4) TOTAL OF (1) AND (2) AND (3)				\$ 141,928
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 13,483
(6) ESTIMATED COST, (4) + (5)				\$ 155,411
(7) PL. ED PROFIT OR FEE 5 % OF ESTIMATED COST, (6)				\$ 13,210
GRAND TOTAL, (6) + (7)				\$ 168,621

## ANALYSIS

FILE: 1940 J (C)

DATE: July 20, 1964

ITEM NO: 8	PR NO: 1940 J(C)
CONTRACT:	
DESCRIPTION OF ITEM: Tooling, Special Mfg. Test Equip. & Field Shop Equip	

DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)	10,231	21,356	14,235	35,591
ENGINEERING	16,801	90,590	3,264	93,854
TECHNICIANS	17,710	64,003	1,556	65,559
PUBLICATIONS				
DESIGN AND DRAFTING	11,782	41,519		41,519
SHOP	24,004	7,647	73,331	80,978
ELECTRICAL ASSEMBLY	11,768	8,540	27,577	36,117
INSPECTION	4,822		15,181	15,181
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING	79		247	247
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR		233,655	135,391	\$ 369,046
OVERHEAD: 105 % OF DIRECT LABOR CLASS (A) \$		245,338		
82.5 % OF DIRECT LABOR CLASS (B) \$		111,697		
(2) TOTAL OVERHEAD				\$ 357,035
RAW MATERIAL AND PURCHASED PARTS		1,254,949		
SUBCONTRACTING		199,570		
TRAVEL AND SUBSISTENCE		7,413		
OVERTIME PREMIUM		20,451		
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES		4,368		
(3) DIRECT CHARGES (OTHER THAN LABOR)				\$ 1,486,751
(4) TOTAL OF (1) AND (2) AND (3)				\$ 2,212,832
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)				\$ 210,219
(6) ESTIMATED COST, (4) + (5)				\$ 2,423,051
(7) PLANNED PROFIT OR FEE 8.5 % OF ESTIMATED COST, (6)				\$ 205,959
GRAND TOTAL, (6) + (7)				\$ 2,629,010

## ANALYSIS

FILE: 1940 J(C)

DATE: July 20, 1964

ITEM NO: 10		PR NO: 1940 J(C)		
DESCRIPTION OF ITEM: Procurement of DPOD #1 Computer		CONTRACT:		
DIRECT LABOR CLASS	TOTAL HOURS	COSTS		TOTAL LABOR
		LABOR CLASS A	LABOR CLASS B	
ADMINISTRATIVE (DIRECT)				
ENGINEERING				
TECHNICIANS				
PUBLICATIONS				
DESIGN AND DRAFTING				
SHOP				
ELECTRICAL ASSEMBLY				
INSPECTION				
SPARES DATA PREPARATION				
PACKAGING AND SHIPPING				
FIELD ENGINEERING				
(1) TOTAL DIRECT LABOR				\$
OVERHEAD:		% OF DIRECT LABOR CLASS (A) \$ _____		
		% OF DIRECT LABOR CLASS (B) \$ _____		
(2) TOTAL OVERHEAD		\$ _____		
RAW MATERIAL AND PURCHASED PARTS				
SUBCONTRACTING		166,600		
TRAVEL AND SUBSISTENCE				
OVERTIME PREMIUM				
PACKAGING AND SHIPPING				
OTHER DIRECT CHARGES				
(3) DIRECT CHARGES (OTHER THAN LABOR)		\$ 166,600		
(4) TOTAL OF (1) AND (2) AND (3)		\$ 166,600		
(5) GENERAL AND ADMINISTRATIVE EXPENSE, 9.5 % OF (4)		\$ 15,827		
(6) ESTIMATED COST, (4) + (5)		\$ 182,427		
(7) PLANNED PROFIT OR FEE 8.5% OF ESTIMATED COST, (6)		\$ 15,506		
GRAND TOTAL, (6) + (7)		\$ 197,933		

SCHEDULE OF FISCAL YEAR EXPENDITURES \*

## (a) Presently Defined Items

<u>Item #</u>	<u>Description</u>	<u>FY 64</u>	<u>FY 65</u>	<u>FY 66</u>	<u>FY 67</u>	<u>TOTAL</u>
1	EMR Equipments	.308	11.198	10.109	1.471	23.086
2(a)	Spare Parts Prov. for Item 1	.001	.167	.113	.003	.284
3	Oper. AGE Equip.	.121	4.447	.791		5.359
4(a)	Spare Parts Prov. for Item 2		.095	.174		.269
5(a)	Configuration Control- Preparatory Document.		.190	.183		.373
6	Engineering Data	.002	.352	.139	.006	.499
7	Training	.001	.030	.122	.016	.169
8	Spec. Tooling, Facility & Equipment	.080	1.334	1.211	.004	2.629
10	Computer for DPOD		.198			.198
	Incremental Totals	.513	18.011	12.842	1.500	32.866

## (b) Recommended Reserve for Undefined Areas - Budgetary

<u>Proposed Item #</u>	<u>Description</u>	<u>FY 64</u>	<u>FY 65</u>	<u>FY 66</u>	<u>FY 67</u>	<u>TOTAL</u>
2(b)	Spare Parts for Item 1 (EMR Equipments)		.500	6.600	1.000	8.100
4(b)	Spare Parts for Item 3 (AGE Equipments)		.100	.400	.100	.600
5(b)	Prosecution of ANA Bul. 445-Cl. II chgs., Spec. Studies & Chgs. (ECP's)		.300	.200		.500
9	Air Veh. Integ. Assist.			.100	.200	.300
	Incremental Totals		.900	7.300	1.300	9.500
	Program Totals	.513	18.911	20.142	2.800	42.366

\* Contractor Fee Included in Above Increments



SCHEDULE OF FISCAL YEAR COMMITMENTS \*

## (a) Presently Defined Items

<u>Item #</u>	<u>Description</u>	<u>FY 64</u>	<u>FY 65</u>	<u>FY 66</u>	<u>FY 67</u>	<u>TOTAL</u>
1	EMR Equipments	.345	16.885	5.729	.127	23.086
2(a)	Spare Parts Prov. for Item 1	.001	.258	.022	.003	.284
3	Oper. AGE Equip.	.886	4.084	.389		5.359
4(a)	Spare Parts Prov. for Item 2		.266	.003		.269
5(a)	Configuration Control- Preparatory Document.		.189	.184		.373
6	Engineering Data	.002	.352	.139	.006	.499
7	Training	.001	.030	.122	.016	.169
8	Spec. Tooling, Facility & Equipment	.344	1.659	.622	.004	2.629
10	Computer for DPOD		.198			.198
Incremental Totals		1.579	23.921	7.210	.156	32.866

## (b) Recommended Reserve for Undefined Areas - Budgetary

<u>Proposed Item #</u>	<u>Description</u>	<u>FY 64</u>	<u>FY 65</u>	<u>FY 66</u>	<u>FY 67</u>	<u>TOTAL</u>
2(b)	Spare Parts for Item 1 (EMR Equipments)		3.500	4.500	.100	8.100
4(b)	Spare Parts for Item 3 (AGE Equipments)		.400	.200		.600
5(b)	Prosecution of ANA Bul. 445-CL. II chgs., Spec. Studies & Chgs. (ECP's)		.300	.200		.500
9	Air Veh. Integ. Assist.			.100	.200	.300
Incremental Totals			4.200	5.000	.300	9.500
Program Totals		1.579	28.121	12.210	.456	42.366

\* Contractor Fee Included In Above Increments

MAJOR SUBCONTRACTOR(S) LISTING \* (EMR's)

<u>Purchase Order No.</u>	<u>Vendor</u>	<u>Value</u>	<u>Type</u>	<u>Description</u>	<u>STAT</u>
		348,000.	FP	Six (6) Frequency Synthesizers	
		3,260,748.	FP	Six (6) SCL's	
		1,080,000.	CPFF	Six (6) W/B Vehicle Recorders	
		208,266.	FP	Six (6) N/B Vehicle Recorders	
		42,689.	FP	Six hundred and thirty (630) 4 AMP (AIL #216160)	
		47,700.	FP	Eighteen (18) BWO (AIL #216012)	
		89,640.	FP	Eighteen (18) BWO (AIL #216031)	
		45,936.	FP	Eighteen (18) BWO (AIL #216032)	
		45,936.	FP	Eighteen (18) BWO (AIL #216033)	
		119,980.	FP	Seven (7) Central Power Supplies (AIL #216060)	
		54,288.	FP	Six hundred and twenty-five (625) Flip Flop 500KC (AIL #216252)	
		193,075.	FP	Two thousand four hundred and seventy- five (2,475) Log IF (AIL #216073)	
		47,752.	FP	One hundred and sixteen (116) Multi- Layer Boards	
		70,436.	FP	Seven hundred and seventy-three (773) One Shot Mult. (AIL #216516)	
		184,697.	FP	One thousand nine hundred and forty- five (1,945) OR/NOR Gates (AIL #216290-1)	

<u>Purchase Order No.</u>	<u>Vendor</u>	<u>Value</u>	<u>Type</u>	<u>Description</u>	
		44,166.	FP	Seven hundred and eighty-one (781) Elements (AIL #215252-2)	STAT
		65,102.	FP	One thousand and ninety-six (1,096) Elements (AIL #215253-2)	
		44,440.	FP	Nine hundred and twenty-two (922) Elements (AIL #215255-2)	
		616,410.	FP	Three (3) Digital Computers for OPS AGE	
		24,000.	T & M	Temperature Testing	
		264,000.	FP	Three (3) Transfer Oscillators	
		196,600.	FP	One (1) SDS 920 Computer including Maintenance Contract	
		144,000.	FP	One (1) Frequency Synthesizer Test Set	
		61,593.	FP	One (1) N/B Recorder/Reproducer	
		500,000.	CPTF	Two (2) W/B Recorder/Reproducer	
		166,600.	FP	One (1) SDS 920 Computer	

- \* General Criteria
- (a) Non-Competitive Fixed Price Procurements in excess of \$50,000.
  - (b) Competitive Fixed Price Procurements in excess of \$100,000.
  - (c) Cost Type Procurements in excess of \$10,000.
  - (d) Facilities Type Procurements in excess of \$1,000.
  - (e) Time & Material Procurements in excess of \$1,000.

CERTIFICATE OF CURRENT PRICING DATA

This is to certify, to the best of my knowledge and belief, that in the preparation of the proposal for  being STAT  
(to-be) produced under the terms of (contract, proposal, ~~quotation, etc.~~)  
No. AF33(657)-12846; (I) all actual or estimated costs or pricing data available as of 24 July 1964 <sup>(1964)</sup> have been considered in preparing the price estimate, and made known to the Contracting Officer or his representative for use in evaluating the estimate, and (II) any significant changes in the above data which have occurred since the aforementioned date through the ---- of ---- ----  
(Date) (Month) (Year)  
also have been made known in the price negotiations to the Government negotiator.

Date 24 July 1964

STAT

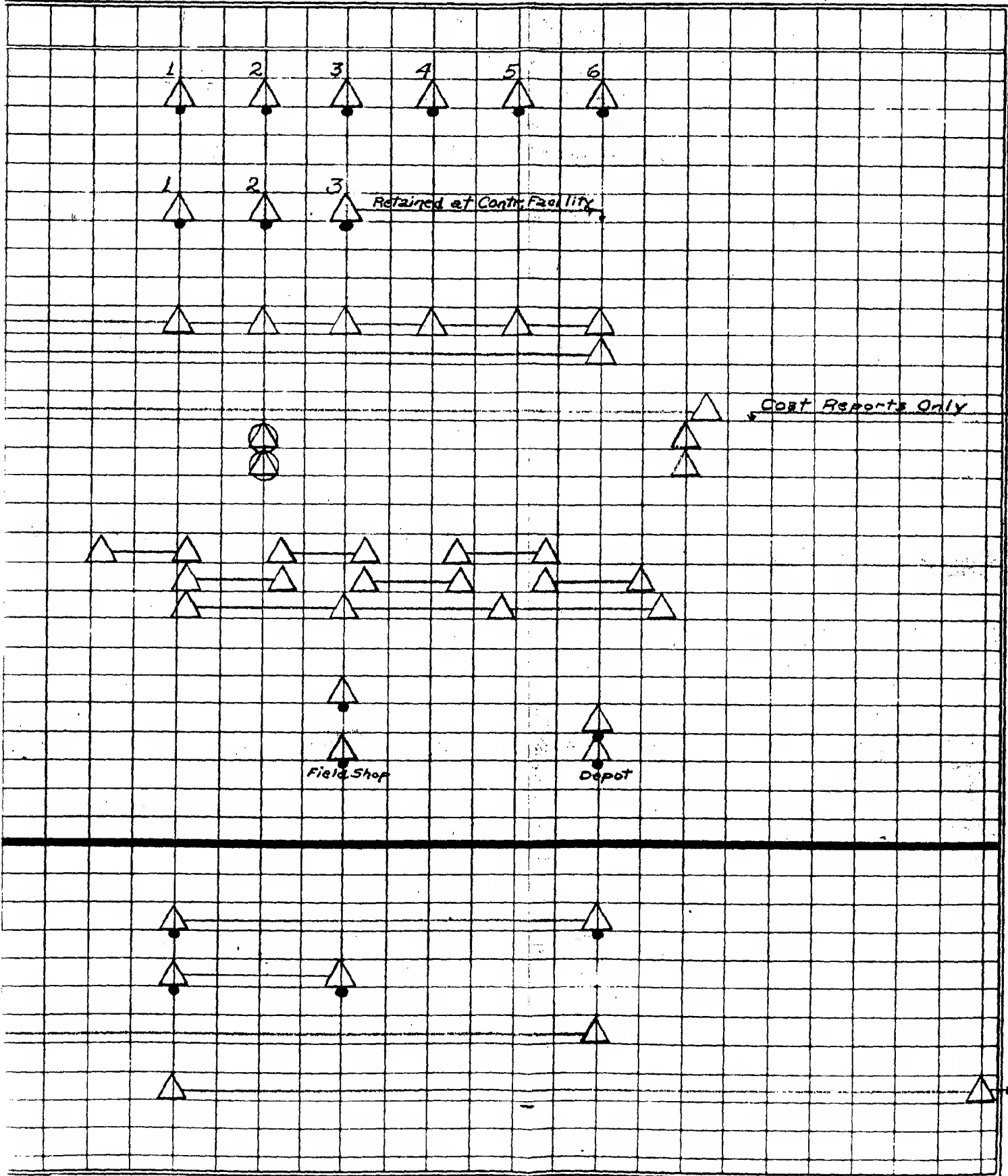
Note that 18 U.S.C. 1001 prescribes criminal penalties for making false representations to the Government.

ASPR 3-807.7  
ASC Ltr 11 Mar 1960

**Page Denied**

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Symbol - Indicates Achieved

FACILITIES

*for new facilities system*

In the performance of Contract AF33(657)-12846 this contractor will require the use of the following facilities furnished under Contract AF33(657)-12278 (DT & E phase):

1. Anechoic Chamber and associates test equipment
2. Antenna Range Test Facility

Note: This contractor's proposal is premised upon utilization of the above facilities on a "no charge basis". In the event such use were to be denied, the proposal submitted herewith would be increased by approximately \$85,000. for item 1 and \$1,200. for item 2 insofar as the respective facilities only are concerned. It is to be recognized significant additional cost and schedule extensions would also be incurred in the event the use of these facilities were to be denied.

In addition to the above, this contractor will have a very nominal "new" facilities requirement for the follow-on systems effort, Contract AF33(657)-12846.

*2nd Contract #*

SPECIAL PRODUCTION TOOLING & TEST EQUIPMENT

Special Production Tooling:

1. In the performance of Contract AF33(657)-12846, this contractor will require the use of all special production tooling fabricated and/or developed under Contract AF33(657)-12278 (DT & E phase).

2. Additional special tooling requirements for the follow-on effort, Contract AF33(657)-12843, have been included under Item 8A hereunder.

Special Test Equipment:

1. Consistent with the direction set forth under Item 8B - the field shop equipment provided for Cat. I and Cat. II testing will be the foundation on which the operating location repair capability will be built - it will presumably be necessary at some future date (conclusion of Cat. II) to transfer for accountability purposes, all special test equipment developed and fabricated under Contract AF33(657)-12278 (DT & E phase) to Contract AF33(657)-12846.

2. The Depot level repair capability which is to be established at this contractor's facility for maintenance of the ☐ systems only, will <sup>STAT</sup> supported by a set of special test equipment which is essentially identical to that developed under the DT & E phase, said identical set of STE having been included under Item 8B hereunder.

It is to be noted that neither a duplicate set, nor any substantial amount of test equipment, is being provided at this contractor's facility for the OPS AGE units. The aforementioned policy is deemed appropriate for two (2) reasons, specifically (i) the nominal amount of



of in-plant maintenance which is anticipated does not warrant expending significant amounts for special test equipment, and (ii) it is believed that the greatest portion of repair activity which cannot be handled on a field shop level will more than likely not be repaired within this contractor's facility but rather returned to the equipment source for restoration.

GOVERNMENT PROPERTY

A - It is requested that the following items of Government Property, provided this contractor on a loan basis under Contract AF33(657)-12278 (DT & E phase), be transferred for use under Contract AF33(657)-12846.

<u>AI Control No.</u>	<u>Description</u>
IR 3089	Air Conditioner, Trailer Mounted Type MA3M, 138,000 BTU
IR 3401	Square Wave Gen. HP 211A
IR 3402	Square Wave Gen. HP 211A
IR 3403	Oscillator, HP 200CD
IR 3404	Oscillator, HP 200CD
IR 3405	Oscilloscope Cart 6625-608-3538
IR 3406	Oscilloscope Cart 6625-608-3538
IR 3407	Oscilloscope Cart 6625-608-3538
IR 3408	Oscilloscope Cart 6625-608-3538
IR 3409	Oscilloscope Cart 6625-608-3538
IR 3410	Oscilloscope Cart 6625-608-3538
IR 3411	Oscilloscope Cart 6625-608-3538
IR 3412	Oscilloscope, Tektronix 545A
IR 3413	Preamplifier, Hickock Type H
IR 3414	Preamplifier, Tektronix Type L
IR 3415	Preamplifier, Hickock Type L
IR 3416	Preamplifier, Tektronix Type H
IR 3417	Function Generator, Tensor 5533
IR 3418	Scope Camera, Dumont

<u>AI Control No.</u>	<u>Description</u>
IR 3419	Scope Camera, Dumont
IR 3420	Multimeter, Triplett 630A
IR 3421	Multimeter, Triplett 630A
IR 3422	Multimeter, Triplett 630A
IR 3423	Multimeter, Simpson 268
IR 3424	Tape Degausser, Aerovox
IR 3427	Function Generator, Tensor 5533
IR 3428	Oscilloscope, Hickock 1805A
IR 3429	Oscilloscope, Tektronix 545A
IR 3430	Scope Preamplifier, Hickock 1832
IR 3431	Scope Preamplifier, Hickock 1832
IR 3432	Scope Preamplifier, Tektronix Type CA
IR 3433	Scope Preamplifier, Tektronix Type CA
IR 3434	Scope Preamplifier, Tektronix Type CA
IR 3435	Scope Preamplifier, Tektronix Type CA
IR 3437	Scope Preamplifier, Tektronix Type CA
IR 3438	Scope Preamplifier, Tektronix Type CA
IR 3439	Scope Preamplifier, Tektronix Type CA
IR 3440	Scope Preamplifier, Tektronix Type CA
IR 3441	Oscilloscope, Hickock 1805A
IR 3442	Oscilloscope, Hickock 1805A

*...T... 10/11/71*  
*all ... items*  
*for support ...*

B - It is requested that the following items be provided this contractor on a "Government Furnished Equipment" (GFE) basis, said items to be used within this contractor's facility for test and check-out of EMR Systems (Serial #3 through #8), OPS AGE equipment and spare parts being delivered under Contract AF33(657)-12846. It is to be noted said items represent costs of approximately \$550,000. which will be incurred, and have not been compiled in the proposal submitted hereunder, if this contractor is to acquire the equipment on an open procurement basis.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
1	Signal Generator, hp 606A	\$ 1,350.
12	Signal Generator, hp 608C(M)	1,320.
5	Signal Generator, hp 612A	1,400.
5	Signal Generator, hp 614A	1,950.
5	Signal Generator, hp 616B	1,950.
5	Signal Generator, hp 618B	2,250.
5	Signal Generator, hp 620A	2,250.
6	Signal Generator, hp 626A	3,400.
6	Signal Generator, hp 628A	3,400.
3	Doubler, hp 938A	1,500.
3	Doubler, hp 940A	1,500.
5	Sweep Generator, Ferrold 900B	1,980.
2	Sweep Generator, Alfred 641K	3,290.
2	Sweep Generator, Alfred 641-KS1	3,590.
2	Sweep Generator, Alfred 642K	3,090.
2	Sweep Generator, Alfred 643K	3,150.
2	Sweep Generator, Alfred 645K	3,450.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
2	Sweep Generator, Alfred 647	\$ 3,350.
2	Sweep Generator, Alfred 648	3,500.
2	Sweep Generator, Alfred 649	3,700.
1	Sweep Generator, Allen Electronics 960	1,450.
1	Pulse Generator, hp 212A	600.
10	Pulse Generator, hp 214A	875.
9	Pulse Generator, Rutherford B7B	720.
3	Pulse Generator, Electropulse 3450D	1,185.
1	Pulse Generator, General Applied Science Lab PSG-1	690.
1	Unit Pulser, General Radio 121	235.
10	Power Meter, hp 431B (01)	525.
12	Thermister Mount, hp 478A	145.
5	Thermister Mount, hp X486A	145.
5	Thermister Mount, hp P486A	195.
5	Thermister Mount, hp K486A	300.
5	Thermister Mount, hp R486A	376.
2	Bolometer Mount, hp 476A	85.
10	Detector Mount, hp 420A	50.
10	Bolometer Mount, PRD627	95.
12	SWR Indicator, hp 415D (01)	425.
2	Coax Slotted Line, Alford 1026-C-13	3,585.
2	Tapered Reducer, Alford 1122-C	200.
1	Coax Slotted Line, Alford 1026-C-6	1,550.
3	Coax Slotted Line, hp 805D	525.
2	Carriage, hp 809B	175.
4	Carriage, 814B	225.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
2	Slotted Section, hp 806B	\$ 200.
2	Slotted Section, hp X810B	90.
2	Slotted Section, hp P810B	110.
2	Slotted Section, hp K815B	265.
2	Slotted Section, hp R851B	265.
5	Slotted Section, Narda 231BRM	710.
2	Tuned Probe, Alford 2162X	165.
2	Tuned Probe, Alford 2163X	125.
5	Untuned Probe, hp 444A	55.
3	Untuned Probe, hp 446B	145.
5	Tuned Probe, Narda 229	145.
10	Bolometer, Narda 610B	12.
2	Frequency Meter, Narda 804	400.
2	Frequency Meter, Narda 805	400.
2	Frequency Meter, FXR N410A	495.
2	Frequency Meter, FXR 414A	495.
2	Frequency Meter, FXR X410A	150.
2	Frequency Meter, FXR Y410A	225.
2	Frequency Meter, FXR K410A	230.
2	Frequency Meter, FXR U410A	280.
6	Electronic Counter, hp 5245L	3,250.
4	Freq. Converter, hp 5253B	500.
3	Freq. Converter, hp 2590A	1,900.
1	Electronic Counter Beckman-Berkely 7370	1,875.
6	Variable Attenuator, hp 355C	125.
7	Variable Attenuator, hp 355D	125.
3	Variable Attenuator, hp X382	275.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
4	Variable Attenuator, hp P382	\$ 300.
4	Variable Attenuator, hp K382	475.
4	Variable Attenuator, hp R382	500.
5	Variable Attenuator, Alfred E101	400.
5	Variable Attenuator, Alfred E103	450.
5	Variable Attenuator, Alfred E105	480.
12	Fixed Attenuator, Weinchel 50-3	60.
12	Fixed Attenuator, Weinchel 50-6	60.
12	Fixed Attenuator, Weinchel 50-10	60.
6	Fixed Attenuator, Weinchel 50-20	75.
12	Fixed Attenuator, Weinchel 210-3	38.
12	Fixed Attenuator, Weinchel 210-6	38.
12	Fixed Attenuator, Weinchel 210-10	38.
6	Fixed Attenuator, Weinchel 210-20	40.
15	Fixed Attenuator - BRM, Narda 7757 M-3	55.
15	Fixed Attenuator - BRM, Narda 7757 M-6	55.
15	Fixed Attenuator - BRM, Narda 7757 M-10	55.
15	Fixed Attenuator - BRM, Narda 7757 M-20	55.
2	Variable Attenuator Daven 640-50	125.
2	Variable Attenuator - Precision Weinchel 905	245.
1	Variable Attenuator - Precision Weinchel 64	1,940.
1	Variable Attenuator Telonic TAB 50A	250.
13	Oscilloscope, Tektronix 535A	1,400.
5	Oscilloscope, Tektronix 543	1,275.
5	Oscilloscope, Tektronix 545A	1,550.
2	Oscilloscope, Tektronix 555	2,600.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
1	Oscilloscope, Tektronix 564	\$ 950.
1	Oscilloscope, Tektronix 585	1,675.
12	Oscilloscope, Preamp, Tektronix Type CA	260.
2	Oscilloscope, Preamp, Tektronix Type D	170.
3	Oscilloscope, Preamp, Tektronix Type H	185.
3	Oscilloscope, Preamp, Tektronix Type L	210.
1	Oscilloscope, Preamp, Tektronix Type G	190.
1	Oscilloscope, Preamp, Tektronix Type K	135.
5	Oscilloscope, Preamp, Tektronix Type Z	235.
1	Oscilloscope, Preamp, Tektronix Type 3A1	410.
1	Oscilloscope, Preamp, Tektronix Type 3B3	525.
5	Oscilloscope, Probe, Tektronix P6006-010-125	22.
5	Oscilloscope, Probe, Tektronix P6017-010-058	16.
2	Oscilloscope, Probe, Tektronix P6017-010-056	14.
2	Oscilloscope, Current Probe, Tektronix 6016-015-030	235.
2	Oscilloscope, Camera, Tektronix C-12	500.
15	Oscilloscope, Mobile Cart, Tektronix 500/53A	140.
1	Power Supply, Lambda LE 101FM	470.
1	Power Supply, Lambda LE 103FM	645.
1	Power Supply, Lambda LE 104FM	825.
1	Power Supply, Lambda LT-2095-M	295.
1	Power Supply, Lambda C-280-M	214.
20	Power Supply, Lambda LA-100-03EM	465.
2	Power Supply, Lambda C-1580M	580.



<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
1	Power Supply, Lambda C-1582M	\$ 680.
11	Power Supply, Power Design 3206	175.
5	Power Supply, Electronic Measurements 212A	129.
10	Power Supply, Lambda hp 721A	245.
3	Receiver, AIL 13211	975.
6	Receiver Preamp, AIL 13231	375.
1	Distortion Analyzer, hp 330B	410.
1	Wave Analyzer, Quan Tech 303	1,425.
1	Spectrum Analyzer, SPA 3/25	3,450.
1	Spectrum Analyzer, hp 8551A/851A	10,000.
1	Spectrum Analyzer, Polarad SA84MB	6,665.
1	Directional Coupler 3 db W/G, hp K752A	110.
2	Directional Coupler 3db W/G, hp P752A	125.
2	Directional Coupler 3 db W/G, hp K752A	200.
2	Directional Coupler 3 db W/G, hp R752A	250.
6	Directional Coupler 3 db, MD1 120902	150.
6	Directional Coupler 3 db, MD1 120903	150.
6	Directional Coupler 3 db, MD1 120904	150.
4	Directional Coupler 10 db, MD1 120910	150.
4	Directional Coupler 10 db, MD1 120911	150.
4	Directional Coupler 10 db, MD1 120912	150.
4	Directional Coupler 10 db Coax, Narda 3040-10	250.
3	Directional Coupler 10 db Coax, Narda 3041-10	200.
3	Directional Coupler 10 db Coax, Narda 3042-10	200.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
3	Directional Coupler 10 db Coax, Narda 3043-10	\$ 200.
2	Low Pass Filter, hp 360A	70.
2	Low Pass Filter, hp 360B	60.
2	Low Pass Filter, hp 360C	50.
2	Low Pass Filter, hp 360D	50.
2	Low Pass Filter, hp X362A	325.
2	Low Pass Filter, hp P362A	350.
1	Low Pass Filter, hp K362A	385.
1	Low Pass Filter, hp R362A	385.
3	Noise Generator Power Supply, AIL 07111	165.
3	Noise Generator Power Supply, AIL 07110	165.
6	Noise Generator, AIL 07004	1,800.
2	Noise Generator, AIL 07050	230.
2	Noise Generator, AIL 07052	190.
2	Noise Generator, AIL 07053	265.
2	Noise Generator, AIL 07091	265.
2	Noise Generator, AIL 07096	895.
1	Noise Generator, hp 343A	100.
1	Noise Generator, hp 345B	100.
1	Noise Figure Meter, hp 342A	815.
1	Square Wave Generator, hp 211A	325.
1	Square Wave Generator, Gruen PSG-1	825.
10	Square Wave Generator, Brocker Labs 205	120.
1	Audio Oscillator, hp 200CD	195.
1	Low Freq. Function Generator; hp 202A	550.
2	Oscillator VHF-UHF, General Radio 1208C	210.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
1	FM Generator, Marconi TF995/A/2	\$ 940.
1	AM Generator, Marconi TF1102	430.
1	Digital Voltmeter, hp DE2401A	3,950.
3	Digital Voltmeter, hp 405BR	890.
7	Digital Voltmeter, hp 3440	1,160.
2	Digital Voltmeter, Plug In, hp 3442A	135.
8	Differential Voltmeter, Fluke 803B	875.
2	RMS Voltmeter, Fluke 910A	545.
2	RF Voltmeter, Boonton 910A	550.
2	AC Voltmeter, hp 410C	300.
1	AC Voltmeter, hp 400H	325.
1	VTVM, RCA WV-98A	80.
1	Multimeter, RCA Voltchmyst	75.
7	Multimeter, Simpson 260	49.
10	Multimeter, Simpson 269	90.
3	Multimeter, Triplet 63CA	30.
6	Admittance Meter, GR 1602-B	295.
22	Line Stretcher, Constant Impedance, GR 874-LTL	97.
4	Line Stretcher, Constant Impedance, GR 874-LK10	33.
4	Adapter, Coax to W/G, hp G281A	40.
5	Adapter, Coax to W/G, hp X281A	25.
4	Adapter, Coax to W/G, hp S281A	50.
43	Adapter, BRM Jack to N Jack, Bendix 21-31114-1	9.
43	Adapter, BRM Jack to N Plug, Bendix 21-31114-2	12.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
20	Adapter, BEM Plug to N Jack, Bendix 21-31114-3	\$ 11.
20	Adapter, BRM Plug to N Plug, Bendix 21-31114-4	12.
20	Adapter, OSM Jack to TNC Plug, Omni Spectra 21060	23.
30	Termination, BEM, MDI 111001	17.
15	Termination, BRM, MDI 111002	17.
20	Termination, BNC, Microlab TA-5MB	35.
10	Termination, N Plug, Narda 370 NM	35.
10	Termination N Jack, Narda 370 NF	35.
4	Termination, W/G, Narda 298/FXR 501A	50.
4	Termination, W/G, Narda 299/FXR & HP	40.
1	Termination, W/G, Narda V297/FXR	50.
5	Variac, GR M20	40.
1	Variac, GR M5MT	20.
1	Variac, GR W20G3M	175.
2	Waveguide Clamp, hp K25	3.
2	Waveguide Clamp, hp P25	3.
2	Waveguide Clamp, hp R25	3.
2	Waveguide Clamp, hp X25	3.
8	Waveguide, 12" RG52/U Flex., Technicraft	22.
7	Waveguide, 18" RG52/U Flex., Technicraft	22.
6	Waveguide, 12" RG91/U Flex., Technicraft	24.
6	Waveguide, 18" RG91/U Flex., Technicraft	35.
6	Waveguide, 12" RG53/U Flex., Technicraft	34.
7	Waveguide, 18" RG53/U Flex., Technicraft	38.

<u>Qty.</u>	<u>Description</u>	<u>Cost (*)</u>
8	Waveguide, 12" RG96/U Flex., Technicraft	\$ 25.
6	Waveguide, 18" RG96/U Flex., Technicraft	28.
10	Waveguide Stand, hp 24	3.
1	Tape Degausser, Ampex 111	95.
1	Head Degausser, Ampex 704-010	8.

(\*) Approx. unit acquisition cost which does not include attendant contractor labor and G & A expenses.